from cond.

specification information .--

REMARKS

Claims 1-25 remain in the application and have been amended hereby.

As will be noted from the Declaration, Applicant is a citizen and resident of Japan and this application originated there.

Accordingly, the amendments to the specification are made to place the application in idiomatic English, and the claims are amended to place them in better condition for examination.

An early and favorable examination on the merits is earnestly solicited.

Respectfully submitted, COOPER & DUNHAM, LLP

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE ABSTRACT OF THE DISCLOSURE

The Abstract of the Disclosure has been amended as follows:

--[This] A base station that measures transmission line quality based on an error rate for received data and determines a traffic [situation] state based on [the] an amount of received data. When the transmission line quality or traffic [situation] state is unsatisfactory, the base station determines a communication system to be [R-ISMA] a Reserved Idle Signal Multiple Access (R-ISMA) system; otherwise [ISMA.] , the system is determined to be an Idle Signal Multiple Access (ISMA) system. A terminal references the system selected by the base station and determines a communication system based on a length of a data packet to be transmitted. When the packet length is small, the terminal adopts R-ISMA; otherwise , the terminal adopts ISMA.--

IN THE CLAIMS

Claims 1-25 have been amended as follows:

--1. (Amended) A base station apparatus for performing wireless communication with one [or more] of a plurality of terminal apparatuses [by] using a contention-based communication system, comprising:

idle signal transmission means for transmitting an idle signal [for] notifying [a] <u>said</u> terminal apparatus that a communication channel is available; and

system selection means for choosing between a first contention-based communication system in which each of said plurality of terminal [apparatus] apparatuses transmits a data packet according to [an] said idle signal without transmitting a control packet and a second contention-based communication system in which each of said plurality of terminal [apparatus] apparatuses transmits a reservation packet according to [an] said idle signal to ensure a communication channel and then transmits [a] said data packet, wherein

said system selection means chooses between said first contention-based communication system and said second contention-based communication system according to a communication [situation] state; and

said idle signal transmission means transmits [to said terminal apparatus an] <u>said</u> idle signal including system specification information for specifying [a] <u>said</u> communication system selected by said selection means <u>to said</u> terminal apparatus.

- --2. (Amended) The base station apparatus according to claim 1, wherein said system selection means chooses [a] said communication system according to a transmission line quality.
 - --3. (Amended) The base station apparatus according to

claim 1, wherein said system selection means chooses [a] <u>said</u> communication system according to a traffic [situation] <u>state</u> on a transmission line.

--4. (Amended) The base station apparatus according to claim 1, wherein

said system selection means [chooses] performs one of choosing between said first contention-based communication system and said second contention-based communication system [or leaves] and leaving no communication system selected according to [a] said communication [situation] state; and

said idle signal transmission means transmits [to said terminal an] said idle signal including system specification information specifying [a] one of said communication system selected by said selection means [or specifying] and that no communication system has been selected to said terminal apparatus.

- claim 1, wherein when said reservation packet is received from [one] said terminal apparatus[,] polling signal transmission means [is] are provided for transmitting [to each terminal apparatus] a polling signal including terminal identification information for specifying [that] said terminal apparatus to each of said plurality of terminal apparatuses.
 - --6. (Amended) A terminal apparatus for performing

wireless communication with a base station apparatus [by] using a contention-based communication system, comprising:

idle signal reception means for receiving an idle signal notifying that a communication channel transmitted from said base station apparatus is available;

system determination means for determining [whether] a data packet communication system [should be] to be one of a first contention-based communication system [for transmitting] that transmits a data packet to [a] said base station apparatus according to [an] said idle signal without transmitting a control packet [or] and a second contention-based communication system [for transmitting] that transmits a reservation packet according to [an] said idle signal to ensure a communication channel and then [transmitting a] transmits said data packet to [a] said base station apparatus;

transmission means for transmitting [a] <u>said</u> data packet to [a] <u>said</u> base station apparatus according to <u>said</u> reception of said idle signal when said system determination means determines [a] <u>said</u> first contention-based communication system and <u>for</u> transmitting to [a] <u>said</u> base station apparatus [a] <u>said</u> reservation packet including terminal identification information according to <u>said</u> reception of said idle signal when said system determination means determines [a] <u>said</u> second contention-based communication system, wherein

said idle signal includes system selection information for choosing between said first contention-based communication

system and said second contention-based communication system; and

said system determination means determines [a] <u>said</u> communication system according to said system selection information and a communication [situation] <u>state</u>.

- --7. (Amended) The terminal apparatus according to claim 6, wherein said system determination means selects [a] <u>said</u> communication system according to said system selection information and a length of [a] said data packet to be transmitted.
- --8. (Amended) The terminal apparatus according to claim 6, wherein said system determination means selects [a] said communication system according to said system selection information and [the] a number of retransmissions for [a] said data packet to be transmitted.
- --9. (Amended) The terminal apparatus according to claim 6, wherein said transmission means transmits [a] <u>said</u> data packet according to <u>a</u> reception of a polling signal when [a] <u>said</u> polling signal received after <u>said</u> reservation packet transmission contains [its own] terminal specification information.
- --10. (Amended) A wireless communication system for performing wireless communication between [one] <u>a</u> base station

apparatus and one [or more] of a plurality of terminal apparatuses [by] using a contention-based communication system, [wherein]

[a] <u>said</u> base station apparatus [comprises] <u>comprising</u>: idle signal transmission means for transmitting an idle signal [for] notifying [a] <u>said</u> terminal apparatus of <u>an</u> availability of a communication channel;

system selection means for choosing between a first contention-based communication system in which each of said plurality of terminal [apparatus] apparatuses transmits a data packet according to [an] said idle signal without transmitting a control packet and a second contention-based communication system in which each of said plurality of terminal [apparatus] apparatuses transmits a reservation packet according to [an] said idle signal to ensure a communication channel and then transmits [a] said data packet[; and] , wherein

said system selection means chooses between said first contention-based communication system and said second contention-based communication system according to a communication [situation] state; and

said idle signal transmission means transmits [to each terminal apparatus an] <u>said</u> idle signal including system specification information for specifying [a] <u>said</u> communication system selected by said selection means <u>to each</u> of said plurality of terminal apparatuses; and

each of said plurality of terminal [apparatus comprises]
apparatuses comprising:

idle signal reception means for reception of said idle signal;

system determination means for determining [a data packet] said communication system to be [a] one of said first contention-based communication system [or a] and said second contention-based communication system; and

transmission means for transmitting [a] <u>said</u> data packet to [a] <u>said</u> base station apparatus according to <u>said</u> reception of said idle signal when said system determination means determines [a], <u>said</u> first contention-based communication system and transmitting [a] <u>said</u> reservation packet including terminal identification information to [a] <u>said</u> base station apparatus according to <u>said</u> reception of said idle signal when said system determination means determines [a] <u>said</u> second contention-based communication system[; and] <u>wherein</u>

said system determination means determines [a] <u>said</u> communication system according to said system selection information and a communication [situation] <u>state</u>.

- --11. (Amended) The wireless communication system according to claim 10, wherein said system selection means of said base station apparatus selects [a] <u>said</u> communication system according to <u>a</u> transmission line quality.
- --12. (Amended) The wireless communication system according to claim 10, wherein said system selection means of said base station apparatus selects [a] said communication

system according to a traffic [situation] <u>state</u> on a transmission line.

- --13. (Amended) The wireless communication system according to claim 10, wherein said system determination means of [a] said terminal apparatus selects [a] said communication system according to said system selection information and a length of [a] said data packet to be transmitted.
- --14. (Amended) The wireless communication system according to claim 10, wherein said system determination means of [a] said terminal apparatus selects [a] said communication system according to said system selection information and [the] a number of retransmissions for [a] said data packet to be transmitted.
- --15. (Amended) The wireless communication system according to claim 10, wherein

said system selection means of said base station apparatus [chooses] performs one of choosing between said first contention-based communication system and said second contention-based communication system [or leaves] and leaving no communication system selected according to [a] said communication [situation] state; and

said idle signal transmission means of said base station apparatus transmits [to said terminal apparatus an] <u>said</u> idle signal including system specification information specifying

- [a] one of said communication system selected by said selection means [or specifying] and that no communication system has been selected.
- according to claim 10, wherein when said reservation packet is received from one of said plurality of terminal [apparatus] apparatuses, said base station apparatus [comprises] utilizes polling signal transmission means [for transmitting] to transmit to each of said plurality of terminal [apparatus] apparatuses a polling signal including terminal identification information [for] specifying [that] said reservation packettransmitting terminal apparatus.
- --17. (Amended) The wireless communication system according to claim 16, wherein said transmission means of said terminal apparatus transmits [a] said data packet according to reception of [a] said polling signal when [a] said polling signal received after said reservation packet transmission contains [its own] terminal specification information.
- --18. (Amended) A wireless communication method implemented between [one] <u>a</u> base station apparatus and [one or mor] <u>a plurality of terminal [apparatus by] apparatuses using a contention-based communication system, comprising the steps of:</u>

thoosing, at [a] said base station [side,] according to a

communication [situation] state, between a first contention-based communication system in which each of said plurality of terminal [apparatus] apparatuses transmits a data packet according to an idle signal without transmitting a control packet and a second contention-based communication system in which each of said plurality of terminal [apparatus] apparatuses transmits a reservation packet according to [an] said idle signal to ensure a communication channel and then transmits [a] said data packet;

transmitting[, at the base station side, an] <u>said</u> idle signal including system specification information specifying [a] <u>said</u> selected communication system [for] notifying [a] <u>one of said plurality of terminal [apparatus] apparatuses</u> of <u>an availability of a communication channel <u>from said base</u> station;</u>

determining, at [a] one of said plurality of terminal [apparatus side] apparatuses, a data packet communication system to be a first contention-based communication system or a second contention-based communication system according to terminal identification information included in said idle signal and [a] said communication [situation] state; and

[at the terminal apparatus side,] transmitting [a] said data packet to [a] said base station apparatus according to a reception of said idle signal when [a] said first contention-based communication system is determined and transmitting [a] said reservation packet including said terminal identification information to [a] said base station

apparatus according to <u>said</u> reception of said idle signal when [a] <u>said</u> second contention-based communication system is determined.

- --19. (Amended) The wireless communication method according to claim 18, wherein [a] <u>said</u> base station apparatus [side] selects [a] <u>said</u> communication system according to <u>a</u> transmission line quality.
- --20. (Amended) The wireless communication method according to claim 18, wherein [a] <u>said</u> base station apparatus [side] selects [a] <u>said</u> communication system according to a traffic [situation on] <u>state of</u> a transmission line.
- --21. (Amended) The wireless communication method according to claim 18, wherein [a] <u>said</u> terminal apparatus [side] selects [a] <u>said</u> communication system according to said system selection information and a length of [a] <u>said</u> data packet to be transmitted.
- --22. (Amended) The wireless communication method according to claim 18, wherein [a] <u>said</u> terminal apparatus [side] selects [a] <u>said</u> communication system according to said system selection information and [the] <u>a</u> number of retransmissions for [a] <u>said</u> data packet to be transmitted.
 - --23. (Amended) The wireless communication method

according to claim 18, wherein [a] <u>said</u> base station apparatus [side chooses] <u>performs one of choosing</u> between said first contention-based communication system and said second contention-based communication system [or leaves] <u>and leaving</u> no communication system selected according to [a] <u>said</u> communication [situation] <u>state</u>; and

said base station apparatus [side] transmits [to said terminal apparatus an] <u>said</u> idle signal including system specification information specifying [a] <u>one of said</u> selected communication system [or specifying] <u>and that</u> no communication system <u>has been</u> selected <u>to said terminal apparatus</u>.

- --24. (Amended) The wireless communication method according to claim 18, wherein when said reservation packet is received from one of said plurality of terminal [apparatus,] apparatuses said base station apparatus [side] transmits to each of said plurality of terminal [apparatus] apparatuses a polling signal including terminal identification information for specifying [that] said terminal apparatus.
- --25. (Amended) The wireless communication method according to claim 24, wherein said terminal apparatus [side] transmits [a] <u>said</u> data packet according to <u>a</u> reception of [a] <u>said</u> polling signal when [a] <u>said</u> polling signal received after <u>said</u> reservation packet transmission contains [its own] terminal specification information.--